数学与系统科学研究院

计算数学所学术报告

报告人：　Dr. Xiongbiao Tu

（ National Astronomical Observatories, Chinese Academy of Sciences ）

报告题目：

Meshless Methods for Magnetohydrodynamics with Vector Potential

邀请人：　唐贻发 研究员

报告时间：2021 年 9 月 28 日（周二）下午 14:00

报告地点：数学院南楼 702 教室

Abstract:

We present a meshless finite-volume Lagrangian methods with magnetic vector potential (VP) for magnetohydrodynamics. In the novel scheme, the evolution of magnetic field theoretically keeps magnetic divergence vanished ($\nabla \cdot B = 0$). In practical, we also need an extra divergence cleaning source term for the numerical stability, similar with the CG scheme in (Hopkins et al.). Two dimensional and three diemensional numerical experiments are employed to verify that VP method. We found it has a better precision and catches more details of shock wave in magnetohydrodynamical system.

欢迎大家参加！